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- (4) Identification and description of the climate control system used on the vehicle.
- (5) Projected number of vehicles sold in the U.S., and projected U.S. sales.
- (6) For electric and hybrid electric vehicles, identification of the energy usage in kilowatt-hours per mile from the point when electricity is introduced from the electrical outlet and the operating range in miles of the vehicle when tested in accordance with the All-Electric Range Test provisions in §86.1770.
- (7) If the vehicle is equipped with a fuel fired heater, a description of the control system logic of the fuel fired heater, including an evaluation of the conditions under which the fuel fired heater can be operated and an evaluation of the possible operational modes and conditions under which evaporative emissions can exist. Vehicles which utilize fuel fired heaters which can be operated at ambient temperatures above 40 °F or which cannot be demonstrated to have zero evaporative emissions under any and all possible operation modes and conditions shall not be certified as ZEVs.
- (8) For ZEVs and HEVs which use fuel fired heaters, the manufacturer shall provide the exhaust emissions value per mile produced by the auxiliary fuel fired heater. This shall be accomplished by determining heater emissions in grams per minute when operating at a maximum heating capacity for a period of 20 minutes, and multiplying that number by 3.6 minutes per mile. At the time of certification, manufacturers shall submit their test plan which describes the procedure used to determine the mass emissions of the fuel fired heater.
- (9) All information necessary for proper and safe operation of the vehicle, including information on the safe handling of the battery system, emergency procedures to follow in the event of battery leakage or other malfunctions that may affect the safety of the vehicle operator or laboratory personnel, method for determining battery state-of-charge, battery charging capacity and recharging procedures, and any other relevant information as determined by the Administrator.

(c) For all vehicles subject to the provisions of §86.1717, with its application for certification a description of the malfunction and diagnostic system to be installed on the vehicles. (The vehicles shall not be certified unless the Administrator finds that the malfunction and diagnostic system complies with the requirements of §86.1717.).

[62 FR 31242, June 6, 1997. Redesignated and amended at 63 FR 986, Jan. 7, 1998]

§86.1722-01 [Reserved]

§86.1722-99 [Reserved]

§86.1723-01 [Reserved]

§86.1723-99 Required data.

The provisions of §86.096-23 and subsequent model year provisions apply to this subpart, with the following exceptions and additions:

- (a) The provisions of §86.096-23(c)(1) and subsequent model year provisions apply to this subpart, with the following addition:
- (1) For all TLEVs, LEVs, and ULEVs certifying on a fuel other than conventional gasoline, manufacturers shall multiply the NMOG exhaust certification level for each emission-data vehicle by the appropriate reactivity adiustment factor listed $\S86.1777(d)(2)(i)$ or established by the Administrator pursuant to appendix XVII of this part to demonstrate compliance with the applicable NMOG emission standard. For all TLEVs, LEVs, and ULEVs certifying on natural gas, manufacturers shall multiply the NMOG exhaust certification level for each emission-data vehicle by the appropriate reactivity adjustment factor listed in §86.1777(d)(2)(i) or established by the Administrator pursuant to appendix XVII of this part and add that value to the product of the methane exhaust certification level for each emission-data vehicle and the appropriate methane reactivity adjustment factor listed in §86.1777(d)(2)(ii) or established by the Administrator pursuant to appendix XVII of this part to demonstrate compliance with the applicable NMOG emission standard. Manufacturers requesting to certify to existing standards utilizing an adjustment factor unique to its vehicle/fuel

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system must follow the data requirements described in appendix XVII of this part. A separate formaldehyde exhaust certification level shall also be provided for demonstrating compliance with emission standards for formaldehyde.

- (2) [Reserved]
- (b) The provisions of §86.096-23(1) introductory text and subsequent model year provisions do not apply to this subpart. The following shall instead apply to this subpart:
- (1) Additionally, manufacturers certifying vehicles shall submit for each model year 2001 through 2004 light-duty vehicle and light light-duty truck engine family, the information listed in §86.096-23(1)(1) and (2). If applicable, manufacturers shall also submit "Alternative or Equivalent Phase-in Schedules" before or during calendar year 2001 for light-duty vehicles and light light-duty trucks.
 - (2) [Reserved]
- (c) In addition to the provisions of §86.096-23 and subsequent model year provisions, the following requirements shall apply to this subpart:
- (1) For each engine family certified to TLEV, LEV, or ULEV standards, manufacturers shall submit with the certification application, an engineering evaluation demonstrating that a discontinuity in emissions of nonmethane organic gases, carbon monoxide, oxides of nitrogen and formaldehyde measured on the Federal Test Procedure (subpart B of this part) does not occur in the temperature range of 20 to 86 deg F. For diesel vehicles, the engineering evaluation shall also include particulate emissions.
 - (2) [Reserved]

[63 FR 986, Jan. 7, 1998]

§86.1724-01 Emission data vehicle selection.

- (a) [Reserved]
- (b) The provisions of §86.1828-01 and subsequent model year provisions apply to this subpart with the following additions:
- (1) For TLEVs, LEVs, ULEVs, and ZEVs certifying according to the provisions of this subpart, a manufacturer may substitute emission data vehicles selected by the California Air Resources Board criteria instead of using

the criteria specified in §§ 86.1828-01(a) through (d) and subsequent model year provisions.

(2) For vehicles certified to the SFTP exhaust emission standards, if air conditioning is projected to be available on any vehicles within the engine family, the selection of engine codes will be limited selections which have air conditioning available and would require that any vehicle selected under this section has air conditioning installed and operational.

[64 FR 23924, May 4, 1999]

§86.1724-99 Test vehicles and engines.

The provisions of §86.096–24 and subsequent model year provisions apply to this subpart, with the following exceptions and additions:

- (a) The provisions of §86.096-24(a)(1) and subsequent model year provisions apply to this subpart, with the following addition:
- (1) All engines classified in the same engine family shall be certified to identical exhaust emission standards.
 - (2) [Reserved]
- (b) The provisions of §86.096-24(b) and subsequent model year provisions apply to this subpart with the following additions:
- (1) For TLEVs, LEVs, ULEVs, and ZEVs certifying according to the provisions of this subpart, a manufacturer may substitute emission data vehicles selected by the California Air Resources Board criteria instead of using the criteria specified in §86.096–24(b)(1) (i), (ii), and (iv) and subsequent model year provisions.
- (2) For vehicles certified to the SFTP exhaust emission standards, if air conditioning is projected to be available on any vehicles within the engine family, the selection of engine codes will be limited selections which have air conditioning available and would require that any vehicle selected under this section has air conditioning installed and operational.

[62 FR 31242, June 6, 1997. Redesignated and amended at 63 FR 986, Jan. 7, 1998]

§86.1725-01 Allowable maintenance.

This section includes text that specifies requirements that differ from §86.1725–99. Where a paragraph in